Fla. Dept. of Agr. and Cons. Serv. Division of Plant Industry

BLACKSPOT OF ROSE¹

J. J. McRitchie

The rose, grown nearly throughout the world, is one of Florida's most popular plants. The flowers are considered by many to be of unsurpassed beauty. It blooms for at least 9 months of the year in the north, and almost the year round in central and southern Florida (2).

Blackspot, caused by the fungus Diplocarpon rosae Wolf, is one of the state's most serious rose diseases (3). The imperfect stage Marssonina rosae (Lib.) Lind. is more commonly observed under Florida conditions. Diplocarpon rosae is the overwintering stage in colder climates (1).

SYMPTOMS. The first symptoms on leaves appear as black circular spots with fringed borders. Depending upon the variety, the spots each may be surrounded by a yellow halo (Fig. 1). Severe infection may result in complete yellowing of the leaves and premature defoliation. This defoliation renders the plant more susceptible to winter injury (4).

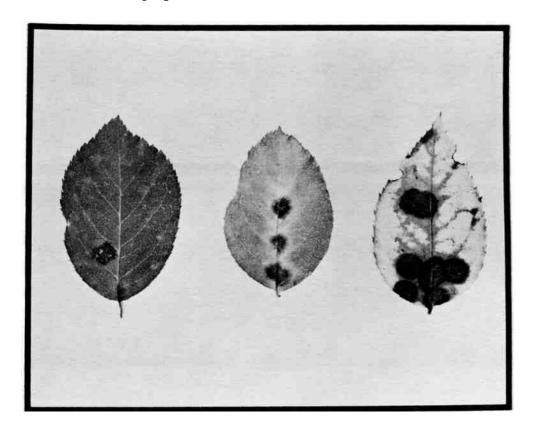


Fig. 1. Blackspot of rose showing light infection on the left and heavy infection with chlorosis on the right.

Revision of Plant Pathology Circular No. 1.

Contribution No. 301, Bureau of Plant Pathology.

CONTROL. Because the fungus survives in plant debris, sanitation measures are helpful in preventing blackspot. Infected and fallen leaves should be removed, and infected canes should be pruned as soon as disease symptoms are noticed. Control measures have been based on protection rather than eradication. Spraying should begin as soon as leaves appear and continue at regular weekly intervals throughout the season (3). Any one of the following fungicides is recommended for use every 7 days: Dithane M-45 80W (1.0 lb/100 gal), Daconil 75W (0.75 lb/100 gal), or Phaltan 75W (1.0 lb/100 gal). The use of the systemic fungicide Benlate SOW (0.5 lb/100 gal) permits an interval of 10 to 14 days between applications. The effectiveness of Benlate, Daconil, and Dithane M-45 is improved when a spreader-sticker is added.

Literature Cited

- 1. Martinez, A. P. 1962. Diplocarpon rosae (Fr.) Wolf. Fla. Dept. Agr., Div. Plant Industry, Plant Pathol. Circ. No. 1. 1 p.
- 2. McFadden, S. E., H. N. Miller, L. C. Kuitert, and A. M. Wilson. 1964. Roses in Florida. Univ. Fla. Agr. Ext. Serv. Bull. 180. 55 p.
- 3. Miller, H. N. and L. C. Kuitert. 1970. Rose diseases and insects in Florida. Univ. Fla. Agr. Ext. Serv. Circ. 345. 22 p.
- 4. Pirone, P. P. 1970. Diseases and pests of ornamental plants. 4th ed. Ronald Press, New York. 546 p.